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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF APPEALS AND INTERFERENCES

In re Application of:

Appeal No. \_\_\_\_\_

DONG-YOUL LEE

Serial No.: 09/805,929

Examiner: DANIEL JR, WILLIE J

Filed: 15 March 2001

Art Unit: 2617

For: CALL ORIGINATING SERVICE METHOD IN A PUBLIC AND PRIVATE  
COMMON MOBILE COMMUNICATION SYSTEM AND APPARATUS

**CORRECTED APPEAL BRIEF**

**Paper No. 36**

**Mail Stop Appeal Brief-Patents**  
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Sir:

In response to the Notice of Non-Compliant Appeal Brief (Paper No. 20080625) mailed 30 June 2008, Applicant submits the Corrected Appeal Brief.

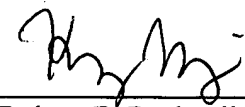
Pursuant to Appellants' Notice of Appeal filed on May 6, 2008, Appellants hereby appeal to the Board of Patent Appeals and Interferences from the rejection of claims 16-28 and 30 as set forth in the Office action mailed on 6 February 2008 (Paper No. 010).

Folio: P56255  
Date: 7/8/08  
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**Total 35 sheets**

  
For Robert E. Bushnell  
Reg. No. 27,774



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**I. REAL PARTY IN INTEREST**

Pursuant to 37 CFR §41.37(c)(1)(as amended), the real party in interest is:

SAMSUNG ELECTRONICS CO., LTD.,  
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Republic of KOREA

as evidenced by the Assignment executed by the inventors on the 2<sup>nd</sup> of March 2001 and recorded by the U.S. Patent and Trademark Office on the 15<sup>th</sup> of March 2001 at Reel 011609, Frame 0757.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no other appeals and no interferences known to Appellant, Appellant's legal representatives or the assignee which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

### **III. STATUS OF CLAIMS**

Claims 1-15 and 29 have been canceled. All remaining pending claims 16-28 and 30 are on appeal. Of all pending claims, claims 16, 17, 18 and 19 are independent, whereas the remaining claims are dependent. Each of claims 1-15 and 29 are being appealed.

#### **IV. STATUS OF AMENDMENTS**

RCE Amendment filed on 21 November 2007 has been entered.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Appellant's invention pertains to a method for and an apparatus for placing a phone call from a mobile phone [fig 1, #24] in a combined public and private common wireless cell area [fig 1, #14]. The call placed (the origination message is delivered) from the caller or originator can be via a public mobile phone network or a private mobile phone network depending 1) whether the caller or originator is registered in the private network and 2) whether the number dialed (destination or termination telephone number) is also part of the private network [paragraphs 0035 and 0036].

The network has a plurality of mobile switching centers or MSC's [fig 1, 2-1 to 2-n], each MSC has a plurality of base station controllers or BCS's [fig 1, 4-1 to 4-m], each base station controllers has a plurality of base station transceiver subsystems or BTS's [fig 1, 6-1 to 6-k], each BTS has a plurality of mobile stations or MS's [fig 1, 20, 22] that are in public-only cell areas [fig 1, #15]. However, in Appellant's invention, there is also a public/private common area [fig 1, #14] that connects to a private BTS [fig 1, 8-k] that connects to a public/private communication service unit [fig 1, #12, paragraphs 0016 and 0017]. If the origination message from a call from the MS [fig 1, #24] located within this public/private common cell area [fig 1, #14] is for use of the public wireless network, the call is connected to a public BSC [figs 1-3, 4-m] from the public/private communication service unit [fig 1, #12] such that the call origination message is transmitted transparently [see the third line of paragraph 0029] from the public/private communication service unit [fig 1, #12] to the public BSC [fig 1, #4-m]. If the MS [fig 1, #24] in the public/private common cell area [fig 1, #14] places a call to the private network, and the MS is registered in the private network, the call or origination message uses a private BSC [figs 2 and 3, #40] connected to a private BTS [figs 1-3, 8-k] to make the call [paragraph 0036].

In the process for making the call, a private BTS router apparatus [fig 4, #54] determines whether the call is to use the public or the private mobile communications network. A private visitor location register or pVLR [fig 4, #64] may be consulted by the pBTS router to determine whether the caller or originator's phone number is in the pVLR to determine whether or not the call is to use the private or the public mobile network. If the call is to use a public mobile network, a public BSC [fig 1, #4-m] is used. If the call is to be handled by a private network, a private BSC [fig 2, #40] is instead used.

16. (Previously Presented) A call originating service method in a public/private common mobile communication system, the method comprising :

providing the public/private common mobile communication system comprising a plurality of mobile stations (Mss)[fig 1, 20, 22, 24], a mobile switching center (MSC) [fig 1, #2-1], a plurality of public mobile communication network base station controllers (BSCs) [fig 1, #4-1 to 4-m] connected to the MSC [fig 1, #2-1], a plurality of public mobile communication network base station transceiver subsystems (BTSSs)[figs 1 & 2, 6-1- to 6-k, 8-1] connected to each of the plurality of BSCs [fig 1, #4-1 to 4-m] , each of the plurality of these BTSSs [figs 1 & 2, 81- to 8-k] adapted to form a corresponding public-only cell area [fig 1, #15], a public/private communication service unit [figs 1&2, #12] connected to one of the public mobile communication network's BSCs [fig 1, 4-m] , and a private BTS [figs 1-3, #8-k] connected to the public/private communication service unit [figs 1&2, #12] , the private BTS [figs 1-3, #8-k] adapted to form a public/private common cell area [fig 1, #14], one of said plurality of Mss [figs 1&2, #24] being within said public/private common cell area [fig 1, #14];

receiving at the public/private communication service unit [figs 1&2, #12] a call



origination message [fig 7] from the MS in the public/private common cell area [fig 1, #14] through the private BTS [figs 1-3, #8-k];

determining whether the MS [figs 1&2, #24] in the public/private common cell area [fig 1, #14] is registered for a private mobile communication service [fig 6, #206] by analyzing the received call origination message [fig 7];

transmitting transparently the call origination message [fig 7] to one of said plurality of public mobile communication network BSCs [fig 6, #218, fig 1, 4-m] when the MS [figs 1&2, #24] in the public/private common cell area [fig 1, #14] is not registered for the private mobile communication service, and determining whether identification information for the private mobile communication service is included in the call origination message [fig 6, #208, fig 7] when the MS [figs 1&2, #24] in the public/private common cell area [fig 1, #14] is registered for the private mobile communication service; and

transmitting transparently the call origination message [fig 7] to one of said plurality of public mobile communication networks BSCs [fig 6, #218, fig 1, #4-1 to 4-m] when the identification information is not included in the call origination message [fig 7], and providing private mobile communication service for the MS [fig 6, #210-216, figs 1&2, #24] in the public/private common cell area [fig 1, #14] when the identification information is included in the call origination message [fig 7].

Appellant's claim 16 pertains to a method for placing a phone call from a mobile phone [fig 1, #24] in a combined public and private common wireless cell area [fig 1, #14]. The call placed (the origination message is delivered) from the caller or originator can be via a public mobile phone network or a private mobile phone network depending 1) whether the caller or originator

is registered in the private network and 2) whether the number dialed (destination or termination telephone number) is also part of the private network [paragraphs 0035 and 0036].

The network has a plurality of mobile switching centers or MSC's [fig 1, 2-1 to 2-n], each MSC has a plurality of base station controllers or BSC's [fig 1, 4-1 to 4-m], each base station controllers has a plurality of base station transceiver subsystems or BTS's [fig 1, 6-1 to 6-k], each BTS has a plurality of mobile stations or MS's [fig 1, 20, 22] that are in public-only cell areas [fig 1, #15]. However, in claim 16, there is also a public/private common area [fig 1, #14] that connects to a private BTS [fig 1, 8-k] that connects to a public/private communication service unit [fig 1, #12, paragraphs 0016 and 0017]. If the origination message from a call from the MS [fig 1, #24] located within this public/private common cell area [fig 1, #14] is for use of the public wireless network, or the MS happens not to be registered to the private network, the call is connected to a public BSC [figs 1-3, 4-m] from the public/private communication service unit [fig 1, #12] such that the call origination message is transmitted transparently [see the third line of paragraph 0029] from the public/private communication service unit [fig 1, #12] to the public BSC [fig 1, #4-m]. If the MS [fig 1, #24] in the public/private common cell area [fig 1, #14] places a call to the private network, and the MS is registered in the private network, the call or origination message uses a private BSC [figs 2 and 3, #40] connected to a private BTS [figs 1-3, 8-k] to make the call [paragraph 0036].

17. (Previously Presented) A public/private common mobile communication system adapted to provide a public/private mobile communication service in association with a public land mobile network (PLMN) [figs 1&2, #1], the system comprising:

a plurality of mobile stations (MSs)[fig 1, 20, 22, 24], a mobile switching center (MSC)[fig 1, #2-1], a plurality of public mobile communication network base station controllers (BSCs) [fig 1, #4-1 to 4-m] connected to the MSC [fig 1, #2-1], and a plurality of public mobile communication network base station transceiver subsystems (BTSs) [figs 1 & 2, 6-1- to 6-k, 8-1] connected to the BSC's [fig 1, #4-1 to 4-m], each of the plurality of public mobile communication network BTSs [figs 1 & 2, 6-1- to 6-k, 8-1] being adapted to form corresponding public-only cell areas [fig 1, #15];

a public/private communication service unit [figs 1&2, #12] connected to one of said plurality of public mobile communication network BSCs [figs 1-3, #4-m]; and

a private BTS [figs 1-3, #8-k] connected to the public/private communication service unit [figs 1&2, #12], the private BTS [figs 1-3, #8-k] adapted to form a public/private common cell area [fig 1, #14], the public/private communication service unit [figs 1&2, #12] receives a call origination message [fig 7] from a particular one of the plurality of Mss [figs 1&2, #24] located in the public/private common cell area [fig 1, #14] through the private BTS [figs 1-3, #8-k], the public/private communication service unit [figs 1&2, #12] being configured to transparently transmit the call origination message [fig 7] to one of the plurality of public mobile communication network BSCs [figs 1-3, #4-m] when the call origination message [fig 7] is a public mobile communication service request message, the public/private communication service unit [figs 1&2, #12] being configured to provide network access for a corresponding private mobile communication service when the call origination message [fig 7] is a private mobile communication service request message.

Appellant's claim 17 pertains to a public/private common mobile communication system

that places a phone call from a mobile phone [fig 1, #24] in a combined public and private common wireless cell area [fig 1, #14]. The call placed (the origination message is delivered) from the caller or originator can be via a public mobile phone network or a private mobile phone network depending upon whether the number dialed (destination or termination telephone number) is also part of the private network [paragraphs 0035 and 0036].

The network has a plurality of mobile switching centers or MSC's [fig 1, 2-1 to 2-n], each MSC has a plurality of base station controllers or BCS's [fig 1, 4-1 to 4-m], each base station controllers has a plurality of base station transceiver subsystems or BTS's [fig 1, 6-1 to 6-k], each BTS has a plurality of mobile stations or MS's [fig 1, 20, 22] that are in public-only cell areas [fig 1, #15]. However, in Appellant's claim 17, there is also a public/private common area [fig 1, #14] that connects to a private BTS [fig 1, 8-k] that connects to a public/private communication service unit [fig 1, #12, paragraphs 0016 and 0017]. If the origination message from a call from the MS [fig 1, #24] located within this public/private common cell area [fig 1, #14] is for use of the public wireless network, the call is connected to a public BSC [figs 1-3, 4-m] from the public/private communication service unit [fig 1, #12] such that the call origination message is transmitted transparently [see the third line of paragraph 0029] from the public/private communication service unit [fig 1, #12] to the public BSC [fig 1, #4-m]. If the MS [fig 1, #24] in the public/private common cell area [fig 1, #14] places a call to the private network, the call or origination message uses a private BSC [figs 2 and 3, #40] connected to a private BTS [figs 1-3, 8-k] to make the call [paragraph 0036].

18. (Previously Presented) A call originating service method in a public/private common

mobile communication system, the method comprising:

providing the public/private common mobile communication system comprising a plurality of mobile stations (Mss) [figs 1&2, 20, 22, 24, 25], a mobile switching center (MSC) [figs 1-3, #2-1], a plurality of public mobile communication network base station controllers (BSCs) [figs 1-3, 4-1 to 4-m] connected to the MSC [figs 1-3, #2-1], a plurality of public mobile communication network base station transceiver subsystems (BTSs) [figs 1&2, 6-1 to 6-k, 8-1] connected to each of the BSC's [figs 1-3, 4-1 to 4-m], each of the plurality of public mobile communication network BTSs [figs 1&2, 6-1 to 6-k, 8-1] adapted to form a corresponding public-only cell area [fig 1, #15], a public/private communication service unit [figs 1&2, #12] connected to a particular one of the plurality of public mobile communication network BSCs [figs 1-3, #4-m], and a private BTS [figs 1-3, #8-k] connected to the public/private communication service unit [figs 1&2, #12], the private BTS [figs 1-3, #8-k] adapted to form a public/private common cell area [fig 1, #14];

determining whether a call origination message [fig 7] is a public mobile communication service request message or a private mobile communication service request message upon receiving the call origination message [fig 7] that requests origination of a call from one of said plurality of mobile stations [fig 1, #24] located in said public/private common cell area [fig 1, #14] through the private BTS [figs 1-3, #8-k]; and

transmitting transparently the call origination message to a base station controller (BSC) [fig 6, #218] of a public land mobile network (PLMN) [figs 2&3, #1] when the call origination message is a public mobile communication service request message, and providing a corresponding private mobile communication service [fig 6, #210-216] when the call origination message [fig 7] is a private mobile communication service request message.

Appellant's claim 18 pertains to a method for placing a phone call from a mobile phone [fig 1, #24] in a combined public and private common wireless cell area [fig 1, #14]. The call placed (the origination message is delivered) from the caller or originator can be via a public mobile phone network or a private mobile phone network depending upon whether the number dialed (destination or termination telephone number) is also part of the private network [paragraphs 0035 and 0036].

The network has a plurality of mobile switching centers or MSC's [fig 1, 2-1 to 2-n], each MSC has a plurality of base station controllers or BCS's [fig 1, 4-1 to 4-m], each base station controllers has a plurality of base station transceiver subsystems or BTS's [fig 1, 6-1 to 6-k], each BTS has a plurality of mobile stations or MS's [fig 1, 20, 22] that are in public-only cell areas [fig 1, #15]. However, in Appellant's claim 18, there is also a public/private common area [fig 1, #14] that connects to a private BTS [fig 1, 8-k] that connects to a public/private communication service unit [fig 1, #12, paragraphs 0016 and 0017]. If the origination message from a call from the MS [fig 1, #24] located within this public/private common cell area [fig 1, #14] is for use of the public wireless network, the call is connected to a public BSC [figs 1-3, 4-m] from the public/private communication service unit [fig 1, #12] such that the call origination message is transmitted transparently [see the third line of paragraph 0029] from the public/private communication service unit [fig 1, #12] to the public BSC [fig 1, #4-m]. If the MS [fig 1, #24] in the public/private common cell area [fig 1, #14] places a call to the private network, and the MS is registered in the private network, the call or origination message uses a private BSC [figs 2 and 3, #40] connected to a private BTS [figs 1-3, 8-k] to make the call [paragraph 0036].

19. (Previously Presented) A call originating service method in a public/private common mobile communication system, the method comprising:

providing a public land mobile network (PLMN) [figs 2&3, #1] comprising a base station transceiver subsystem (BTS) [figs 1&2, #8-1] adapted to form a public cell area that is interworked with a private mobile communication network comprising a BTS [figs 1-3, #8-k] adapted to form a public/private common cell area [fig 1, #14] enabling a subscriber to be provided with both a public mobile communication service and a private mobile communication service using a single mobile station [figs 1&2, #24] in said public/private common cell area [fig 1, #14];

determining whether a call origination message [fig 7] is a public mobile communication service request message or a private mobile communication service request message upon receiving the call origination message for requesting origination of a call from a mobile station [figs 1&2, #24] in the public/private common cell area through the BTS [figs 1-3, #8-k] in the private mobile communication network ; and

transparently transmitting the call origination message to a base station controller (BSC) [fig 6, #218] of the PLMN when the call origination message is a public mobile communication service request message, and providing a corresponding private mobile communication service [fig 6, #210-216] when the call origination message is a private mobile communication service request message.

Appellant's claim 19 pertains to a method for placing a phone call from a mobile phone [fig 1, #24] in a combined public and private common wireless cell area [fig 1, #14]. The call placed (the origination message is delivered) from the caller or originator can be via a public mobile phone network or a private mobile phone network depending upon whether the number dialed

(destination or termination telephone number) is also part of the private network [paragraphs 0035 and 0036].

The network has a plurality of mobile switching centers or MSC's [fig 1, 2-1 to 2-n], each MSC has a plurality of base station controllers or BCS's [fig 1, 4-1 to 4-m], each base station controllers has a plurality of base station transceiver subsystems or BTS's [fig 1, 6-1 to 6-k], each BTS has a plurality of mobile stations or MS's [fig 1, 20, 22] that are in public-only cell areas [fig 1, #15]. However, in Appellant's claim 19, there is also a public/private common area [fig 1, #14] that connects to a private BTS [fig 1, 8-k] that connects to a public/private communication service unit [fig 1, #12, paragraphs 0016 and 0017]. If the origination message from a call from the MS [fig 1, #24] located within this public/private common cell area [fig 1, #14] is for use of the public wireless network, the call is connected to a public BSC [figs 1-3, 4-m] from the public/private communication service unit [fig 1, #12] such that the call origination message is transmitted transparently [see the third line of paragraph 0029] from the public/private communication service unit [fig 1, #12] to the public BSC [fig 1, #4-m]. If the MS [fig 1, #24] in the public/private common cell area [fig 1, #14] places a call to the private network, and the MS is registered in the private network, the call or origination message uses a private BSC [figs 2 and 3, #40] connected to a private BTS [figs 1-3, 8-k] to make the call [paragraph 0036].



## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The Examiner rejected claims 16-18, 25-26, 28 and 30 under 35 U.S.C. §103 as being unpatentable over Widergen et al. (US 5,890,064) in view of Mauger et al. (US 5,537,610).

The Examiner rejected claims 19 and 27 are rejected under 35 U.S.C. §103 as being unpatentable over Widergen et al. '064 in view of Fujii (US 5,818,918).

The Examiner rejected claims 20-21 under 35 U.S.C. §103 as being unpatentable over Widergen et al. '064 in view of Mauger et al. '610, and further in view of Fujii (US 5,818,918).

The Examiner rejected claims 22 and 24 under 35 U.S.C. §103 as being unpatentable over Widergen et al. '064 in view of Mauger et al. '610, and further in view of Lu et al. (US 5,537,610).

The Examiner rejected claims 23 under 35 U.S.C. §103 as being unpatentable over Widergen et al. '064 in view of Lu et al. '610.

Since Appellant's claims have been repeatedly rejected using the Widergen, Mauger, Lu and Fujii combination, Appellant submits that this is now ripe for appeal.

## VII. ARGUMENT

In each of Appellant's independent claims 16-19, Appellant claims transmitting transparently a call origination message to a base station controller (BSC) in a public mobile communication network. Appellant submits that none of the applied prior art references to Widergen (USP 5,890,064), Mauger (USP 5,537,610), Fujii (USP 5,818,918) or Lu (USP 5,537,610) teach or suggest this feature. Because none of the applied prior art references teach or suggest this feature, Appellant submits that the prior art rejection of Appellant's claims are without merit as per MPEP 2143.03.

The Examiner has a large number of arguments as to why he disagrees with Appellant regarding the above, the principal argument being that Widergen, in case 5 (col 9, lines 39-58) teaches this transparent transmission of a call origination message. Appellant disagrees. Appellant has previously explained (e.g., pp 11-12 of Jan 30, 2007 and p 15 of Nov 21, 2007 amendment) to the Examiner in a number of occasions that although Widergen does discuss transparent transmission of a dialed number in col 9, lines 39-58 (case 5) of Widergen, Appellant submits that this section of Widergen does not teach or fairly suggest transparent transmission of a call origination message. This is because a dialed phone number is not a call origination message. Appellant's call origination message is the packet as illustrated in Appellant's FIG. 7 which is entirely different than a dialed telephone number. Because Widergen only teaches transparent transmission of a dialed number and not a call origination message, and because a call origination message is something entirely different from a dialed number, Appellant submits that the Examiner's primary argument that Widergen teaches transparent transmission of a call

origination message is without merit.

Not only has Appellant explained that the dialed number of Widergen does not read on Appellant's call origination message, but Appellant has also previously explained e.e., pp 11-12 of Jan 30, 2007 amendment and Nov 14, 2006 Interview) why Widergen can not transparently transmit a call origination, but to no avail. Specifically, Appellant submits that col 5, lines 49-53 and col 9, line 39-col 10, line 1 of Widergen teach that a call from a CMT located in a wireless office system 142 to a PMT is completed through the route of RAN 126-WO gateway 124-PTN 108-PSTN 104-GMSC 136-MSC 112. Appellant submits that in this scenario of Widergen, the call origination message is changed in this scenario to route the call from the wireless communication network to the wired communication network.

Appellant also submits that col 2, lines 33-37 and FIG. 1 of Widergen teach that WO gateway 142 of the wireless office system is connected to an MSC 112 of a public cellular system 140 via interface C, and also, from col 5, lines 7-12 of Widergen it can be known that the signaling between the WO gateway 142 and the MSC 112 follows the MSC to MSC signaling which changes the call origination message without it being restored. Because of this, Appellant submits that Widergen actually teaches that the call origination message is permanently changed.

#### **Examiner's other Assertions**

In addition to asserting that Widergen's case 5 above teaches transparent transmission of a call origination message, the Examiner also asserted, throughout the prosecution history, to support the prior art rejections that 1) since the call origination message contains a dialed number,

the taught dialed number of Widergen renders Appellant's claimed transparent transmission of the call origination message obvious, 2) that the claimed limitation of transparent transmission of a call origination message is not supported by Appellant's originally filed specification, 3) that col 7, lines 4-22 of Widergen teaches transparent transmission of a call origination message, 4) that col 12, lines 1-10 of Widergen teaches transparent transmission of a call origination message, 5) that col 12, lines 34-37 of Widergen teaches transparent transmission of a call origination message, 6) that col 13, lines 34-67 of Widergen teaches transparent transmission of a call origination message, 7) that col 7, lines 63-65 of Widergen teaches transparent transmission of a call origination message, 8) that Mauger teaches transparent transmission of a call origination message, 9) that Fujii teaches transparent transmission of a call origination message, 10) that Widergen's MSC to MSC signaling changes the call origination message but this is still transparent, 11) that Appellant is arguing against the applied prior art references individually and 12) that since the word "transparent" is not defined in Appellant's specification, Appellant's arguments regarding this word in the claims are without merit. Appellant has addressed all of these assertions made by the Examiner in the Remarks section of Appellant's amendments dated June 28, 2005, January 30, 2007, August 21, 2007 and November 21, 2007 and in personal Interviews with the Examiner on December 23, 2004 and November 14, 2006, but to no avail. In response to each of Appellant's Remarks, the Examiner produces an endless and continual line of additional arguments and concerns as to why Appellant's claims should not be allowed.

Appellant will now address the Examiner's secondary concerns 1-12 individually:

**Examiner's Secondary Assertion #1) Since the call origination message contains a dialed**

**number, the taught dialed number of Widergen renders Appellant's claimed transparent transmission of the call origination message obvious**

Appellant has made clear in Appellant's specification and in Appellant's FIG. 7 that a call origination message is not a dialed number but is instead contains a source address, a message, a type byte, a length byte, source and destination processor IDs in addition to a destination address. Because Appellant's call origination message contains all these fields, it can not be said that a dialed telephone number reads on Appellant's call origination message.

**Examiner's Secondary Assertion #2) that the claimed limitation of transparent transmission of a call origination message is not supported by Appellant's originally filed specification**

Appellant submits that paragraph 0029 of Appellant's originally filed specification provides adequate support for this feature.

**Examiner's Secondary Assertion #3) that col 7, lines 4-22 of Widergen teaches transparent transmission of a call origination message**

Col 7, lines 4-22 of Widergen says:

“Call setup messages from MSC 112 to WO Gateway 124 over interface C for calls to a CMT requiring a traffic path via PTN 108, and call setup messages from PTN 108 to WO Gateway 124 over interface A requiring a call setup to a CMT in PLMN 102, both are directed to a PN. To distinguish between the two types of calls, a call control function within WO Gateway 124 adds a called network element (CNE) indicating that the call is directed toward PTN 108 or toward PLMN 102. The called network element is added to the call setup record. For example, if the call is requested over interface C, the CNE indicates PTN 108 as the called network and, if requested over interface A, the CNE indicates PLMN 102 as the called network.

The PN is the only number used within WO Gateway 124 and PTN 108 to identify a CMT. Within public cellular system 140, when WO Gateway 124 requests information through VLR enq 210 on the location of a CMT from

HLR/SCP 110 using a PN, SCF 202 converts the PN to the MIN of the CMT. A wireless office system internal numbering plan (WONP) is used for the conversion.”

Appellant submits that this passage of Widergen says nothing about transparent transmission of a call origination message. Quite the contrary, and as explained in Appellant’s January 30, 2007 amendment, this passage of Widergen discusses calls using interface C between MSC 112 and WO Gateway 124. Col 5, lines 7-12 of Widergen state that this is accomplished by MSC to MSC signaling, which means that the call origination message must be altered.

**Examiner’s Secondary Assertion #4) that col 12, lines 1-10 of Widergen teaches transparent transmission of a call origination message**

Col 12, lines 1-10 of Widergen states:

“Case 8: Call from CMT located in wireless office system 142 to CMT located in public cellular system 140.

- 1) The user of a CMT in wireless office system 142 originates the call by dialing the PN of a CMT located in public cellular system 140.
- 2) RAN link 216 function of WO Gateway 124 receives the call from RAN 126.
- 3) As the caller is a CMT, the call is unconditionally routed to PTN 108. The dialed PN is also transparently sent to PTN 108 on the signaling link.”

Appellant submits that this section of Widergen does not teach transparent transmission of a call origination message. Instead, it teaches transparent transmission of a dialed personal number, which is different from a call origination message.

**Examiner’s Secondary Assertion #5) that col 12, lines 34-37 of Widergen teaches transparent**

**transmission of a call origination message**

Col 12, lines 34-37 of Widergen states:

“1) The user of a CMT roaming in public cellular system 140 originates a call by dialing the external line prefix plus the number of a PMT to request a call to the PMT located in public cellular system 140.”

Appellant submits that this passage has nothing to do with a call origination message or the transparent transmission of a call origination message.

**Examiner’s Secondary Assertion #6) that col 13, lines 34-67 of Widergen teaches transparent transmission of a call origination message**

Col 13, lines 34-67 of Widergen states:

“The embodiment shown in FIG. 3 may also be configured to include the alternative function (Guest function) of allowing a PMT to roam as if wireless office system 142 is contained within PLMN 102. With the guest function, RAN 126 and WO Gateway 124 may support PMTs of public cellular system 140 not belonging to the corporate group (guests) within wireless office system 142. This embodiment allows PMTs to use wireless office system 142 as part of public cellular system 140.

In the guest function, WO Gateway 124 is enhanced to perform a switch function for PLMN 102 without support from PTN 108. RAN link 216 is enhanced to perform calling number (A-number) analysis when a PMT or CMT operating in wireless office system 142 initiates a call. During the A-number analysis, RAN link 216 retrieves information on the calling MT from VLR 214 and determines if the MT is a corporate or public MT. MSC routing function 302 is enhanced to handle guests on the direct trunk from MSC 110 to WO Gateway 124. VLR 226 is enhanced to allow differentiation between PMTs and CMTs when a MT registers in wireless office system 142. VLR 226 determines the user characteristics from the subscriber database of HLR 206. The subscriber characteristics are stored in registers within VLR 226.

When a mobile subscriber registers in a cell of wireless office system 142, the

attributes of the subscriber (public or corporate group) are downloaded from HLR 206 and stored in VLR 226 of WO Gateway 124. When processing calls involving mobile subscribers located within the wireless office system 142, WO Gateway 124 will use the attribute information to distinguish between guests and corporate mobile subscribers. In this feature, calls involving roaming public mobile subscribers (guests) are routed over the direct trunk line between MSC 112 and WO Gateway 124.”

Appellant submits that this passage has nothing to do with transparent transmission of a call origination message. Instead, it pertains to the guest function of roaming. To the contrary, this passage of Widergen describes use of the link between MSC 112 and WO gateway 124, which in col 5, lines 7-12 of Widergen is described as MSC to MSC signaling, which positively changes the call origination message.

**Examiner’s Secondary Assertion #7) that col 7, lines 63-65 of Widergen teaches transparent transmission of a call origination message**

Col 7, lines 63-65 of Widergen states:

“Because the call is from a CMT, the call is unconditionally routed to PTN 108. Also, the dialed number is transparently sent to PTN 108 on the signaling link.”

Appellant submits that as described above and as discussed in Appellant’s January 30, 2007 Remarks, a dialed number is not a call origination message, and consequently the above passage of Widergen does not teach transparent transmission of a call origination message.

**Examiner’s Secondary Assertion #8) that Mauger teaches transparent transmission of a call origination message**



In prosecution (i.e., page 6 of Paper No. 10), the Examiner asserts that Mauger discloses transmitting a call origination message to one of a plurality of BSCs and therefore Widergen as combined with Mauger more than adequately meets Appellant's claim limitations. Appellant disagrees. Appellant submits that Mauger, like Widergen, fails to teach transparent transmission of a call origination message to a public mobile network as claimed by Appellant. Appellant submits that since none of the applied prior art references teaches or suggests transparent transmission of a call origination message to a public mobile network, the prior art rejections of Paper No. 8 are without merit for failing to fairly teach or suggest all of Appellant's claim limitations (see MPEP 2143.03).

**Examiner's Secondary Assertion # 9) that Fujii teaches transparent transmission of a call origination message**

On Page 15 of Paper No. 10, the Examiner asserts that col 2, lines 25-45 and FIG. 1 of Fujii teach transparent transmission of a call origination message. Appellant disagrees. Appellant submits that col 2, lines 25-45 of Fujii state,

“Referring to FIG. 1, description will be made as regards a personal handy phone system (PHS) according to a preferred embodiment of this invention. The PHS comprises a public PHS network 11 and a public PHS base station (hereinafter called a public CS) 12 connected to the public PHS network 11 through a first interface IF1. The public CS 12 has a public service area 13 and is communicable with a public PHS terminal (hereinafter called a public PS) 14 located within the public service area 13 through a second interface IF2. A private branch exchange (hereinafter abbreviated to PBX) 15 is connected to the public PHS network 11 through a third interface IF3 and to a public wire network 16 through a fourth interface IF4. A common PHS base station (hereinafter called a common CS) 17 is connected to the PBX 15 through a fifth interface IF5. A combination of the PBX 15 and the common CS 17 forms a local area telephone network. The common CS

17 has a private service area 18 covering a local area and is communicable with a public PS 19 and a private PS 20, both of which are located within the private service area 18, through sixth and seventh interfaces IF6 and IF7, respectively.”

Appellant submits that this section, along with the entire reference to Fujii, does not even mention call origination message or the transparent transmission thereof.

**Examiner’s Secondary Assertion #10) that Widergen’s MSC to MSC signaling changes the call origination message but this is still transparent**

In prosecution, the Examiner asserts that the MSC to MSC signaling of Widergen does not infer that the call origination message is not transparently transmitted because Appellant’s definition of “transparently” on Page 10 of Appellant’s January 30 amendment indicates that the message can be changed and still be transparent. Appellant disagrees. Appellant submits that Appellant, on Page 10 of Appellant’s January 30 Amendment, states that if a message is changed and then restored to its original form within a single transmission system, the transmission system is still transparent. In the MSC to MSC signaling of Widergen, the call origination message is changed without being restored, which makes it non-transparent.

**Examiner’s Secondary Assertion #11) that Appellant is arguing against the applied prior art references individually**

In prosecution (e.e., paragraph 11 of Paper No. 11), the Examiner alleges that Appellant’s Remarks are non-persuasive because Appellant is arguing against each reference individually and is thus not addressing what the combination of references teach or suggest. Appellant disagrees.

Appellant submits that Appellant is arguing that none of the applied prior art references teach the limitation of transparent transmission of a call origination message, and because none of the applied references has this feature, the prior art rejections are without merit.

MPEP 2143.03 states that in a 35 U.S.C. 103 rejection, all claim limitations must be taught or suggested. Appellant submits that Appellant's limitation regarding transparent transmission of a call origination message is not taught or suggested. Because this limitation is not taught or suggested by the applied prior art references, the prior art rejections are without merit. Appellant has previously argued this on pp 13-14 of the August 21, 2007 amendment but to no avail.

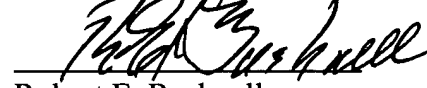
**Examiner's Secondary Assertion #12) that since the word "transparent" is not defined in Appellant's specification, Appellant's arguments regarding this word in the claims are without merit**

Appellant has not defined the word "transparent" in the specification because the word "transparent" has a standardized meaning to those of ordinary skill in the art. MPEP 2173.02 and 2173.05 (a) state that a term in a claim is clear and precise if the meaning of the term is apparent from the prior art or from those skilled in the art. Appellant submits that that threshold has been met, especially when the definition of "transparency" along with "transparent network" and "transparent interface" is clearly defined in a federal standard and is viewable at [www.its.bldrdoc.gov/fs-1037](http://www.its.bldrdoc.gov/fs-1037) as submitted previously in an IDS and being discussed in paragraph 0029 of Appellant's specification.

In view of the law and facts stated herein as well as all the foregoing reasons, Appellants believe that the rejection is improper and respectfully request that the Board refuse to sustain the outstanding rejection of claims 16-28 and 30 under 35 U.S.C. §102 and §103.

**No fee is incurred by filing this Corrected Appeal Brief.**

Respectfully submitted,



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## VIII. APPENDIX

### CLAIMS UNDER APPEAL (Claims 16-28 & 30)

1           16. (Previously Presented) A call originating service method in a public/private common  
2 mobile communication system, the method comprising :

3           providing the public/private common mobile communication system comprising a plurality  
4 of mobile stations (MSs), a mobile switching center (MSC), a plurality of public mobile  
5 communication network base station controllers (BSCs) connected to the MSC, a plurality of  
6 public mobile communication network base station transceiver subsystems (BTSs) connected to  
7 each of the plurality of BSCs, each of the plurality of these BTSs adapted to form a corresponding  
8 public-only cell area, a public/private communication service unit connected to one of the public  
9 mobile communication network's BSCs, and a private BTS connected to the public/private  
10 communication service unit, the private BTS adapted to form a public/private common cell area,  
11 one of said plurality of MSs being within said public/private common cell area;

12           receiving at the public/private communication service unit a call origination message from  
13 the MS in the public/private common cell area through the private BTS;

14           determining whether the MS in the public/private common cell area is registered for a  
15 private mobile communication service by analyzing the received call origination message;

16           transmitting transparently the call origination message to one of said plurality of public  
17 mobile communication network BSCs when the MS in the public/private common cell area is not  
18 registered for the private mobile communication service, and determining whether identification  
19 information for the private mobile communication service is included in the call origination  
20 message when the MS in the public/private common cell area is registered for the private mobile

21 communication service; and

22 transmitting transparently the call origination message to one of said plurality of public  
23 mobile communication networks BSCs when the identification information is not included in the  
24 call origination message, and providing private mobile communication service for the MS in the  
25 public/private common cell area when the identification information is included in the call  
26 origination message.

1 17. (Previously Presented) A public/private common mobile communication system  
2 adapted to provide a public/private mobile communication service in association with a public land  
3 mobile network (PLMN), the system comprising:

4 a plurality of mobile stations (MSs), a mobile switching center (MSC), a plurality of public  
5 mobile communication network base station controllers (BSCs) connected to the MSC, and a  
6 plurality of public mobile communication network base station transceiver subsystems (BTSs)  
7 connected to the BSC's, each of the plurality of public mobile communication network BTSs being  
8 adapted to form corresponding public-only cell areas;

9 a public/private communication service unit connected to one of said plurality of public  
10 mobile communication network BSCs; and

11 a private BTS connected to the public/private communication service unit, the private BTS  
12 adapted to form a public/private common cell area, the public/private communication service unit  
13 receives a call origination message from a particular one of the plurality of MSs located in the  
14 public/private common cell area through the private BTS, the public/private communication  
15 service unit being configured to transparently transmit the call origination message to one of the  
16 plurality of public mobile communication network BSCs when the call origination message is a

public mobile communication service request message, the public/private communication service unit being configured to provide network access for a corresponding private mobile communication service when the call origination message is a private mobile communication service request message.

18. (Previously Presented) A call originating service method in a public/private common mobile communication system, the method comprising:

providing the public/private common mobile communication system comprising a plurality of mobile stations (MSs), a mobile switching center (MSC), a plurality of public mobile communication network base station controllers (BSCs) connected to the MSC, a plurality of public mobile communication network base station transceiver subsystems (BTSS) connected to each of the BSC's, each of the plurality of public mobile communication network BTSS adapted to form a corresponding public-only cell area, a public/private communication service unit connected to a particular one of the plurality of public mobile communication network BSCs, and a private BTS connected to the public/private communication service unit, the private BTS adapted to form a public/private common cell area;

determining whether a call origination message is a public mobile communication service request message or a private mobile communication service request message upon receiving the call origination message that requests origination of a call from one of said plurality of mobile stations located in said public/private common cell area through the private BTS; and

transmitting transparently the call origination message to a base station controller (BSC) of a public land mobile network (PLMN) when the call origination message is a public mobile communication service request message, and providing a corresponding private mobile

19 communication service when the call origination message is a private mobile communication  
20 service request message.

1 19. (Previously Presented) A call originating service method in a public/private common  
2 mobile communication system, the method comprising:

3 providing a public land mobile network (PLMN) comprising a base station transceiver  
4 subsystem (BTS) adapted to form a public cell area that is interworked with a private mobile  
5 communication network comprising a BTS adapted to form a public/private common cell area  
6 enabling a subscriber to be provided with both a public mobile communication service and a  
7 private mobile communication service using a single mobile station in said public/private common  
8 cell area;

9 determining whether a call origination message is a public mobile communication service  
10 request message or a private mobile communication service request message upon receiving the  
11 call origination message for requesting origination of a call from a mobile station in the  
12 public/private common cell area through the BTS in the private mobile communication network;  
13 and

14 transparently transmitting the call origination message to a base station controller (BSC)  
15 of the PLMN when the call origination message is a public mobile communication service request  
16 message, and providing a corresponding private mobile communication service when the call  
17 origination message is a private mobile communication service request message.

1 20. (Previously Presented) The method of claim 16, calls from the MS in the common cell  
2 area to the public mobile communication network are directly connected and interworked with the



public mobile communication network without having to go through additional circuitry.

21. (Previously Presented) The system of claim 17, calls from the MS in the common cell area to the public mobile communication network are directly connected and interworked with the public mobile communication network without having to go through additional circuitry.

22. (Previously Presented) The method of claim 16, calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network.

23. (Previously Presented) The method of claim 19, calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network.

24. (Previously Presented) The system of claim 17, calls from the MS in the common cell area to the private mobile communication service are not routed through a public mobile communications network and are not routed through a landline telephone network.

25. (Previously Presented) The method of claim 16, the common cell area being an area that provides both public and private mobile communication services to a MS within the area without requiring the MS to roam.

26. (Previously Presented) The system of claim 17, a public/private communication

2 service unit and the private BTS providing both public and private mobile services simultaneously  
3 and without requiring a MS in the common cell area to roam to a new location to receive both of  
4 these services.

1 27. (Previously Presented) The method of claim 19, the public/private common cell area  
2 providing both public mobile and private mobile services to a MS located within the common cell,  
3 both public mobile and private mobile services being available to the MS without requiring the MS  
4 to move or roam to a different location.

1 28. (Previously Presented) The method of claim 16, public mobile communication service  
2 or private mobile communication service is provided based on the call origination message  
3 transmitted from the MS.

1 30. (Previously Presented) The method of claim 16, the call origination message being a  
2 message according to MS communication signaling.

**IX. EVIDENCE APPENDIX**

None.

**X. RELATED PROCEEDINGS APPENDIX**

None.